IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method ~~for determining a downlink delay in communicating packets via a packet-conveying network from a sender to a receiver or an uplink delay for communicating packets from the receiver to the sender, or both the downlink delay and also the uplink delay, or for determining uplink or downlink capacities or both,~~ the method comprising:

~~a step in which the sender and receiver exchange a first pair of packets consisting~~ ~~of~~transmitting a first uplink packet of a first pair of packets;~~and~~

receiving a first downlink packet of the first pair of packets;~~and~~

~~determine~~determining a first round trip time for the ~~exchange~~ transmission and reception of the first pair of packets; ~~and~~

~~a step in which the sender and receiver exchange a second pair of packets consisting~~ ~~of~~transmitting a second uplink packet of a second pair of packets; ~~and~~

receiving a second downlink packet of the second pair of packets; and

~~determine~~determining a second round trip time for the ~~exchange~~transmission and reception of the second pair of packets;

wherein ~~at least either~~ the first uplink packet and the second uplink ~~packets~~packet or the first downlink packet and the second downlink packet differ in size, and ~~or~~the first and second ~~downlink~~ packets in the opposite direction as the first and second packets differing in size ~~differ in~~ have the same size.

2. (Currently Amended) The method of claim 1, ~~wherein the steps in which the sender and receiver exchange a pair of packets are repeated with at least either the first and second uplink packets or the first and second downlink packets differing in size, and the round trip times for the respective exchanges are also again determined, and the sender then determines~~further comprising determining a processed round trip ~~times~~ time for each of the ~~exchanges~~ transmission and reception of the first pair of packets and the transmission and reception of the second pair of packets by performing a statistical analysis of the first round trip ~~times~~ time and the second round trip time for the respective ~~exchanges~~ transmission and receptions.

3. (Currently Amended) The method of claim 1, further comprising:

~~a step in which the sender determines~~determining for a packet of size S the uplink delay ~~and downlink delays~~ D_u and the downlink delay D_d, ~~respectively,~~using:

$$D\_u = S(t\_A-t\_B)/(s\_uA-s\_uB),$$

and

$$D\_d = S[t\_B-d\_r-((s\_uB*(t\_A-t\_B))/(s\_uA-s\_uB))]/s\_d,$$

in which d_r is a ~~receiver delay indicating a~~delay between ~~when the receiver receives~~receiving one of the downlink packets and ~~when the receiver transmits~~transmitting the corresponding uplink packet~~in response~~, t_A is the first round trip time for ~~exchanging~~transmission and reception of the first pair of packets of consisting of the first uplink packet having size s_uA and the first downlink packet having size s_d, and in which t_B is the second round trip time for ~~exchanging~~transmission and reception of the second pair of packets of consisting of the second uplink packet having size s_uB and the second downlink packet having ~~the same~~ size s_d ~~as the first downlink packet, wherein s_uA is different than s_uB~~.

4. (CANCELLED)

5. (Currently Amended) The method of claim 1, further comprising:

~~a step in which the sender determines~~determining the uplink and downlink capacities C_u and C_d, respectively, using:

$$C\_u = (s\_uA-s\_uB)/(t\_A-t\_B),$$

and

$$C\_d = s\_d/[t\_B-d\_r-((s\_uB*(t\_A-t\_B))/(s\_uA-s\_uB))],$$

in which d_r is a delay between receiving one of the downlink packets and transmitting the corresponding uplink packet, t_A is the first round trip time for ~~exchanging~~transmission and reception of the first pair of packets consisting of the first uplink packet having size s_uA and the first downlink packet having size s_d, and in which t_B is the second round trip time for ~~exchanging~~transmission and reception of the second pair of packets consisting of the second

uplink packet having size s_uB and the second downlink packet having ~~the same~~ size s_d ~~as the first downlink packet, wherein s_uA is different than s_uB~~.

6. (CANCELLED)

7. (Original) The method of claim 1 wherein a dynamical quantity is associated with the delay estimates or with the capacity estimates and wherein either the capacities or the delays or both are estimated based on the dynamical quantity using already collected information about the capacities and the delays or both and also using the related dynamical quantity.

8. (Original) The method of claim 7 wherein the dynamical quantity is the time of day.

9. (Original) The method of claim 7 wherein the dynamical quantity is the time of day and the day of the week.

10. (Currently Amended) The method of claim 1, wherein at least one of the first pair of packets or the second pair of packets is used to convey information either of use in a predetermined protocol, or of use in determining a receiver delay quantity indicating a delay between ~~when the receiver receives~~receiving the downlink packet and ~~when the receiver transmits~~transmitting the uplink packet ~~in response~~.

11. (Currently Amended) A computer program product comprising: a computer readable storage ~~structure~~medium embodying computer program code thereon for execution by a computer processor in a sender device, with said computer program code comprising instructions for performing ~~the steps of the~~a method ~~of claim 1~~ comprising:

transmitting a first uplink packet of a first pair of packets;

receiving a first downlink packet of the first pair of packets;

determining a first round trip time for the transmission and reception of the first pair of packets;

transmitting a second uplink packet of a second pair of packets;

receiving a second downlink packet of the second pair of packets; and

determining a second round trip time for the transmission and reception of the second pair of packets;

wherein the first uplink packet and the second uplink packet or the first downlink packet and the second downlink packet differ in size, and the first and second packets in the opposite direction as the first and second packets differing in size have the same size.

12. (Currently Amended) An apparatus ~~included in a sender device for determining a downlink delay in communicating packets via a packet-conveying network from the sender to a receiver or an uplink delay for communicating packets from the receiver to the sender, or both the downlink delay and also the uplink delay, or for determining uplink or downlink capacities or both, the apparatus~~ comprising:

~~means by which the sender and receiver exchange a first pair of packets consisting of~~a sender module configured to transmit a first uplink packet of a first pair of packets; ~~and~~

a receiver module configured to receive a first downlink packet of the first pair of packets; and

a processor configured to determine a first round trip time for the ~~exchange~~ transmission of the first pair of packets; ~~and~~

~~means by which the sender and receiver exchange a second pair of packets consisting of~~wherein the sender module is configured to transmit a second uplink packet of a second pair of packets; ~~and~~

wherein the receiver module is configured to receive a second downlink packet of the second pair of packets; ~~and~~

and the processor is configured to determine a second round trip time for the ~~exchange~~ transmission and reception of the second pair of packets; and

wherein the first uplink packet and the second uplink packet or the first downlink packet and the second downlink packet differ in size, and the first and second packets in the opposite direction as the first and second packets differing in size have the same size~~wherein at least either the first and second uplink packets or the first and second downlink packets differ in size~~.

13. (Currently Amended 1) The apparatus of claim 12, wherein ~~the means by which the sender and receiver exchange a pair of packets repeats the exchange at least once with at least either the first and second uplink packets or the first and second downlink packets differing in size for each exchange, and also again determines the round trip times for the respective exchanges, and then determines~~ the processor is configured to determine a processed round trip ~~times~~ time for each of the ~~exchanges~~ transmission and reception of the first pair of packets and the transmission and reception of the second pair of packets by performing a statistical analysis of the first round trip ~~times~~ time and the second round trip time for the respective ~~exchanges~~ transmissions and receptions.

14. (Currently Amended) The apparatus of claim 12, ~~further comprising:~~

~~means by which the sender determines~~wherein the processor is configured to determine for a packet of size S the uplink delay ~~and downlink delays~~ D_u and the downlink delay D_d, ~~respectively,~~ using:

$$D\_u = S(t\_A - t\_B)/(s\_uA - s\_uB),$$

and

$$D\_d = S[t\_B - d\_r - ((s\_uB*(t\_A - t\_B))/(s\_uA - s\_uB))]/s\_d,$$

in which d_r is ~~a receiver delay indicating~~ a delay between ~~when the receiver receives~~receiving one of the downlink packets and ~~when the receiver transmits~~transmitting the corresponding uplink packet ~~in response~~, t_A is the first round trip time for ~~exchanging~~ transmission and reception of the first pair of packets ~~of~~ consisting of the first uplink packet having size s_uA and the first downlink packet having size s_d, and in which t_B is the second round trip time for ~~exchanging~~ transmission and reception of the second pair of packets ~~of~~ consisting of the second uplink packet having size s_uB and the second downlink packet having ~~the same~~ size s_d ~~as the first downlink packet, wherein s_uA is different than s_uB~~.

15. (CANCELLED)

16. (Currently Amended) The apparatus of claim 12, ~~further comprising:~~

~~means by which the sender determines~~wherein the processor is configured to determine the uplink and downlink capacities C_u and C_d, respectively, using:

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$$C\_u = (s\_uA - s\_uB)/(t\_A - t\_B),$$

and

$$C\_d = s\_d/[t\_B - d\_r - ((s\_uB*(t\_A - t\_B))/(s\_uA - s\_uB))],$$

in which d_r is a delay between receiving one of the downlink packets and transmitting the corresponding uplink packet, t_A is the first round trip time for ~~exchanging~~ transmission and reception of the first pair of packets consisting of the first uplink packet having size s_uA and the first downlink packet having size s_d, and in which t_B is the second round trip time for ~~exchanging~~ transmission and reception of the second pair of packets consisting of the second uplink packet having size s_uB and the second downlink packet having ~~the same~~ size s_d ~~as the first downlink packet, wherein s_uA is different than s_uB~~.

17. (CANCELLED)

18. (Original) The apparatus of claim 12 wherein a dynamical quantity is associated with the delay estimates or with the capacity estimates and wherein either the capacities or the delays or both are estimated based on the dynamical quantity using already collected information about the capacities and the delays or both and also using the related dynamical quantity.

19. (Original) The apparatus of claim 18 wherein the dynamical quantity is the time of day.

20. (Original) The apparatus of claim 18 wherein the dynamical quantity is the time of day and the day of the week.

21. (Currently Amended) The apparatus of claim 12, wherein at least one of the packets is used to convey information either of use in a predetermined protocol, or of use in determining a ~~receiver~~ delay quantity indicating a delay between ~~when the receiver receives~~receiving the downlink packet and ~~when the receiver transmits~~transmitting the uplink packet in response.

22. (Currently Amended) A system, comprising: ~~a telecommunication network, and a sender device and a receiver device communicatively coupled thereby, the sender including an apparatus as in~~

~~claim 12~~

a sender device and receiver device configured to exchange a first pair of packets comprising a first uplink packet and a first downlink packet, and wherein at least the sender device is configured to determine a first round trip time for the exchange of the first pair of packets;

wherein the sender device and receiver device are further configured to exchange a second pair of packets comprising a second uplink packet and a second downlink packet, and wherein at least the sender device is configured to determine a second round trip time for the exchange of the second pair of packets, and

wherein the first uplink packet and the second uplink packet or the first downlink packet and the second downlink packet differ in size, and the first and second packets in the opposite direction as the first and second packets differing in size have the same size.